FREY ENVIRONMENTAL, INC.

Environmental Geologists, Engineers, Assessors

2817 A Lafayette Avenue
Newport Beach, CA 92663
(949) 723-1645
Fax (949) 723-1854
Email: freyinc@freyinc.com

April 25, 2003
420-01

Ms. Leona Winner
Hazardous Substances Scientist
Department of Toxic Substance Control
8800 Cal Center Drive
Sacramento, CA 95826

Re: RFI Workplan Addendum
LaBarron Investments
2100 East Orangethorpe Avenue
Fullerton, California

Dear Ms. Winner:

This letter serves as an addendum to the Revised RFI Facility Investigation Workplan dated October 15, 2002 prepared by FREY Environmental, Inc. (FREY) as requested by the Department of Toxic Substance Control (DTSC) in their letter dated March 20, 2003. The March 20, 2003 letter requested the further assessment of volatile organic compounds (VOCs) previously detected beneath the property located at 2100 East Orangethorpe Avenue in Fullerton (Site - Figure 1).

BACKGROUND

Former Facility Operations

The facility was constructed in the late 1950's by the Trent Tube Company. The Trent Tube Company manufactured stainless steel tubing until 1984. The manufacturing process required the use of numerous regulated chemicals including oil, kerosene, liquid hydrogen, liquid ammonia, organic solvents, acids and pickle liquor (DTSC, 2000).

Trent Tube constructed one building with approximate dimensions of 300 feet from north to south and 130 feet from east to west. The majority of the building housed the manufacturing operations for the Trent Tube Company. Offices, a laboratory and a locker room were located in the northernmost section of the building. A second building used for maintenance activities was formerly located on the eastern portion of the Site. The maintenance building had approximate dimensions of 40 feet by 60 feet (DTSC, 2000).

Chemical Storage Areas

The DTSC identified five areas of the Site where chemicals and/or chemical waste were either used or stored for extended periods of time. The five areas listed below are shown on Figure 2.

1. Drum Storage Area: Fifty five gallon capacity, steel drums were formerly located on the south side of the manufacturing building. Shallow soil samples previously collected from this area reportedly contained perchloroethene (PCE), 1,1,1-trichloroethane (1,1,1-TCA), ethylbenzene and xylenes at concentrations of 1.7 parts per million (ppm), 1.5 ppm, 1.7 ppm and 1.7 ppm, respectively (DTSC, 2000).

2. Aboveground Waste Oil Tanks: Two, 200 gallon capacity, aboveground, steel tanks were formerly located on concrete and set within a brick berm in the approximate area shown on Figure 2. It was reported that soils were excavated from this area and transported off Site for disposal (DTSC, 2000).

3. Aboveground Pickle Liquor Tanks: Two, 2,000 gallon capacity, aboveground tanks, which reportedly contained pickle liquor (hydrochloric acid), were formerly located inside the southeast portion of the manufacturing building. It was reported that the spent pickle liquor contained hexavalent chromium and possibly lead (DTSC, 2000).

4. Degreasing Pit: It was reported that a 10,000 gallon capacity degreasing pit was located in the central portion of the manufacturing building. The degreasing pit reportedly contained 1,1,1-TCA, PCE and/or trichloroethene (TCE) (DTSC, 2000).

5. Southern Property Line: It was reported that an approximate 50 foot by 200 foot area located south of the manufacturing building was used for the aeration of soils which reportedly contained organic solvents at concentrations up to 5 ppm. It was reported that aerated soils were placed in the top two feet of soil (DTSC, 2000).

Soil and Soil Vapor Investigation

On October 22, 2002, FREY advanced and collected soil samples from 20 soil borings. In addition, ten soil vapor samples were collected from nine different locations in the five areas of concern noted above. Soil boring and soil vapor prove locations are shown on Figure 2.

Eight soil vapor probes were advanced to final depths of 5 feet below the ground surface (bgs) in the drum storage area and the southern property line. In addition, soil vapor samples were collected from depths of 10 feet bgs and 20 feet bgs from boring B1 advanced on the north side of the former degreasing pit. VOCs were detected in relatively low concentrations in the 10 soil vapor samples. The greatest concentrations of VOCs were detected in soil vapor samples SV1 and SV3 which were advanced in the drum storage area. The cumulative concentrations of VOCs in samples SV1 and

SV3 were 222 micrograms per liter (ug/L) and 200 ug/L, respectively. The soil vapor sample collected from a depth of 10 feet bgs from boring B1 contained a cumulative VOC concentration of 217 ug/L (FREY, 2002). Soil vapor sample data has been summarized in Table 1.

Soil borings were advanced to depths between 2 and 10 feet bgs in the five areas of concern. In general, soil samples were analyzed for either VOCs and total recoverable petroleum hydrocarbons (TRPH) or selected metals, depending upon chemicals or wastes formerly used or stored in the specific area of concern (FREY, 2002).

VOCs were not present above the laboratory detection limits of 5 micrograms per kilogram (ug/kg) in any of the soil samples collected and analyzed for VOCs. This includes soil samples collected from borings B1 through B4 (advanced around the former degreasing pit) or in the background samples collected from B18 through B20. Total recoverable petroleum hydrocarbons (TRPH) were detected in only one of the 14 soil samples collected and analyzed for TRPH. Low concentrations of TRPH were detected in a soil sample collected from the former aboveground waste oil tank area (FREY, 2002).

Selected metals were detected in soil samples but at concentrations below the Environmental Protection Agency's Preliminary Remediation Goal for Industrial Soils. Soil sample results have been summarized in Tables 2 and 3.

OBJECTIVES

The objective of the activities described below are to assess the lateral and vertical extent of vapor phase VOCs previously detected in soil gas samples collected from the drum storage area, southern property line and near the former degreasing pit.

FIELD INVESTIGATION

Prefield Activities

FREY will mark proposed soil vapor probe locations with white paint and obtain an underground service alert number prior to the implementation of any field activities. FREY will follow procedures set forth in the Site Safety Plan previously used at the Site.

Lateral and Vertical Assessment of VOCs in the Former Drum Storage Area/Southern Property Line

FREY proposes to advance and sample soil vapor probes SV9 through SV13 in the locations shown on Figure 2 in order to assess the lateral extent of VOCs previously detected in soil vapor probes SV1 through SV7. Soil vapor probes will be driven through the asphalt or concrete with a direct push drilling rig to a depth of 5 feet bgs. Soil vapor samples will be collected from a depth of 5 feet bgs by placing a retractable, perforated tip at the end of a direct push rod.

The vertical extent of VOCs in the drum storage area and southern property line will be assessed by advancing soil vapor probes SV14 and SV15 to depths of 30 feet bgs in the location of previously sampled soil vapor probes SV1 and SV3, respectively. Soil vapor samples SV1 and SV3 contained the greatest concentrations of VOCs during the previous investigation. Soil vapor samples will be collected from depths of 10, 20 and 30 feet bgs from soil vapor probes SV14 and SV15.

Lateral and Vertical Assessment VOCs near the Former Degreasing Pit

The lateral and vertical extent of vapor phase VOCs previously detected in vapor samples collected from boring B1 will be assessed through the advancement and sampling of soil vapor probes SV16 through SV19. Soil vapor probe SV16 will be advanced and sampled in the same location as previously sampled boring/soil vapor probe B1. Soil vapor probes SV17 through SV19 will be advanced approximately 45 feet to the north, southwest and southeast of soil vapor probe SV16, respectively.

Soil vapor probes SV16 through SV19 will driven through the concrete with a direct push drilling rig to final depths of 40 feet bgs. Soil vapor samples will be collected from soil vapor probe SV16 at depths of 30 and 40 feet bgs by placing a retractable, perforated tip at the end of the direct push rod. Soil vapor samples will be collected from soil vapor probes SV17, SV18 and SV19 at depths of 10, 20, 30 and 40 feet bgs by placing a retractable, perforated tip at the end of a direct push rod.

Soil Vapor Sampling Protocol

All vapor samples will be collected through tygon tubing connected to a perforated tip at the end of the direct push rod. The tygon tubing, which extends from the direct push rod at the ground surface, will be connected to a peristaltic pump. The peristaltic pump will pump vapor directly into each tedlar bag. The tedlar bag will be labeled with the soil vapor probe number, sample depth, date, and time of collection, and immediately delivered to the on-Site mobile laboratory. Each vapor probe will be purged of one liter of vapor prior to soil vapor sample collection.

All down hole pneumatic push and sampling equipment will be decontaminated between each vapor probe. The decontamination process consists of three five gallon buckets. The first bucket will contain tap water and tri-sodium phosphate. A scrub brush is used in the first bucket to enhance the removal of soil and contaminants from the equipment. The second bucket will contain tap water and the third bucket will be filled with de-ionized water. Downhole equipment will be allowed to air dry or will be dried with a clean towel.

Soil Vapor Sample Analyses

Soil vapor samples will be analyzed for VOCs in accordance with EPA Method No. 8260B in an on Site mobile laboratory. Baseline On-Site Analysis (California certification number 2282) will conduct the analyses of soil vapor samples immediately after sample collection. The detection limits for VOCs will be set at 5 ug/L.

Additional Considerations

Equipment decontamination, calibration and maintenance, sample handling and documentation procedures and quality control measures will follow the procedures outlined in Sections 5.3 and 6.0 of FREY's Revised RCRA Facility Investigation Workplan which is dated October 15, 2002 (FREY, 2002).

DATA MANAGEMENT AND REPORTING

Field measurements, observations and chemical analyses of soil vapor samples will be evaluated and interpreted in context with the existing on-site soil conditions and the hydrogeological setting.

Please phone us at (949) 723-1645 with any questions.

Sincerely,
FREY Environmental, Inc.

Joe Frey
Principal
CEG #1500

Evan Privett
Senior Project Geologist

Attachments:
Table 1 - Chemical Analyses of Soil Vapor Samples
Table 2 - TRPH and Volatile Organic Compound Analyses of Soil Samples
Table 3 - Metal Analyses of Soil Samples
Figure 1 - Site Location Map
Figure 2 - Site Sketch Showing Proposed Soil Vapor Probe Locations

cc: Eddie Fischer
LaBarron Investments
2020 East Orangethorpe Avenue
Fullerton, California 92831

TABLES

TABLE 1
CHEMICAL ANALYSES OF SOIL VAPOR SAMPLES

LABARRON INVESTMENTS
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA

(results in micrograms per liter)

SAMPLE NUMBER	DATE SAMPLED	SAMPLE LOCATION	cis-1,2-DCE	TCE	PCE	1,1-DCE	1,1-DCA	1,1,1-TCA	1,1,1,2-PCA	Total VOCs
B1-10	10/22/02	North Side of Former	5.5	8.6	28	80	9.0	86	ND<1.0	217.1
B1-20	10/22/02	Degreasing Pit	7.7	9.9	25	17	5.2	24	ND<1.0	88.8
SV1	10/22/02	Former Drum Storage Area	16	38	74	8.7	9.5	76	ND<1.0	222.2
SV2	10/22/02	Former Drum Storage Area	1.3	5.3	130	ND<1.0	ND<1.0	ND<1.0	ND<1.0	136.6
SV3	10/22/02	Former Drum Storage Area	7.2	22	96	16	5.1	54	ND<1.0	200.3
SV4	10/22/02	Former Drum Storage Area	5.1	15	47	23	3.4	39	ND<1.0	132.5
SV5	10/22/02	Southern Property Line	1.7	7.0	37	12	ND<1.0	ND<1.0	ND<1.0	57.7
SV6	10/22/02	Southern Property Line	5.5	13	63	5.2	4.3	ND<1.0	56	147
SV7	10/22/02	Southern Property Line	3.9	5.5	43	ND<1.0	ND<1.0	ND<1.0	ND<1.0	52.4
SV8	10/22/02	Southern Property Line	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	0

Notes

1 Soil vapor samples were analyzed in general accordance with EPA Method No. 8260B for the full list of compounds. Only detected compounds have been listed in this table.

2 ND<1.0 - Chemical constituent not present above the stated detection limit.

TABLE 2
TRPH AND VOLATILE ORGANIC COMPOUND ANALYSES OF SOIL SAMPLES

LABARRON INVESTMENTS
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA

(results in micrograms per kilogram)

SAMPLE NUMBER	DEPTH OF SAMPLE	SAMPLE LOCATION	DATE SAMPLED	TRPH	cis 1,2-DCE	TCE	PCE	1,1-DCE	1,1-DCA	1,1,1-TCA
B1-2	2	North Side of	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B1-10	10	Degreasing Pit	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B1-20	20		10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B2-1	1	East Side of	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B2-10	10	Degreasing Pit	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B3-1	1	South Side of	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B3-10	10	Degreasing Pit	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B4-1	1	West Side of	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B4-10	10	Degreasing Pit	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B8-2	2	Fomer AboveGround Waste Oil Tank	10/22/02	ND<10,000	NA	NA	NA	NA	NA	NA
B9-2	2	Fomer AboveGround Waste Oil Tank	10/22/02	59,000	NA	NA	NA	NA	NA	NA
B18-1	3	Background Sample Northwestern Portion of Site	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0

TABLE 2
TRPH AND VOLATILE ORGANIC COMPOUND ANALYSES OF SOIL SAMPLES

LABARRON INVESTMENTS
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA

(results in micrograms per kilogram)

SAMPLE NUMBER	DEPTH OF SAMPLE	SAMPLE LOCATION	DATE SAMPLED	TRPH	cis 1,2-DCE	TCE	PCE	1,1-DCE	1,1-DCA	1,1,1-TCA
B19-1	3	Background Sample Northeastern Portion of Site	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
B20-1	3	Background Sample Souteastern Portion of Site	10/22/02	ND<10,000	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0

Notes
1 TRPH = Total recoverable petroleum hydrocarbons analyzed in general accordance with EPA Method No. 418.1
2 Soil samples analyzed for EPA 8260B full list including fuel oxygenates.
3 NA = Not analyzed for listed constituent

TABLE 3
METAL ANALYSES OF SOIL SAMPLES

LABARRON INVESTMENTS
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA

(results in milligrams per kilogram)

SAMPLE NUMBER	DEPTH OF SAMPLE	SAMPLE LOCATION	DATE SAMPLED	TOTAL CHROMIUM	HEXAVALENT CHROMIUM	TOTAL LEAD	NICKEL	pH
B1-2	2	North Side of	10/22/02	ND<5.0	0.13	2.23	11.5	NA
B1-10	10	Degreasing Pit	10/22/02	ND<5.0	ND<0.100	0.81	2.02	NA
B2-1	1	East Side of	10/22/02	ND<5.0	0.24	1.12	4.13	NA
B2-10	10	Degreasing Pit	10/22/02	ND<5.0	ND<0.100	0.95	3.81	NA
B3-1	1	South Side of	10/22/02	ND<5.0	ND<0.100	1.38	4.66	NA
B3-10	10	Degreasing Pit	10/22/02	ND<5.0	ND<0.100	0.76	3.02	NA
B4-1	1	West Side of	10/22/02	ND<5.0	ND<0.100	1.05	4.35	NA
B4-10	10	Degreasing Pit	10/22/02	ND<5.0	ND<0.100	1.01	3.53	NA
B5-1	1	Northwest Portion of Former Process Tanks	10/22/02	ND<5.0	0.32	3.00	12.2	8.97
B6-1	1	Southwest Portion of Former Process Tanks	10/22/02	ND<5.0	0.17	2.40	9.19	8.68
B7-1	1	Eastern Portion of Former Process Tanks	10/22/02	ND<5.0	1.15	9.51	16.9	8.47
B8-2	2	Fomer AboveGround Waste Oil Tank	10/22/02	11.3	ND<5.0	3.21	11.6	NA
B9-2	2	Fomer AboveGround Waste Oil Tank	10/22/02	11.0	ND<5.0	4.78	10.5	NA
B10-1	1	Fomer Acid	10/22/02	10.4	NA	2.61	12.9	NA
B10-5	5	Storage Area	10/22/02	1.81	NA	0.60	2.28	NA
B10-10	10		10/22/02	3.03	NA	0.74	2.54	NA
B11-1	1	Fomer Kerosene	10/22/02	17.2	NA	9.71	15.5	NA
B11-5	5	Storage Area	10/22/02	2.07	NA	0.73	2.67	NA
B11-10	10		10/22/02	2.88	NA	0.65	3.20	NA
B12-1	1	Fomer Drum	10/22/02	26.6	NA	8.52	31.3	NA
B12-5	5	Storage Area	10/22/02	4.00	NA	0.84	4.84	NA
B12-10	10		10/22/02	4.26	NA	1.00	4.21	NA

TABLE 3
METAL ANALYSES OF SOIL SAMPLES

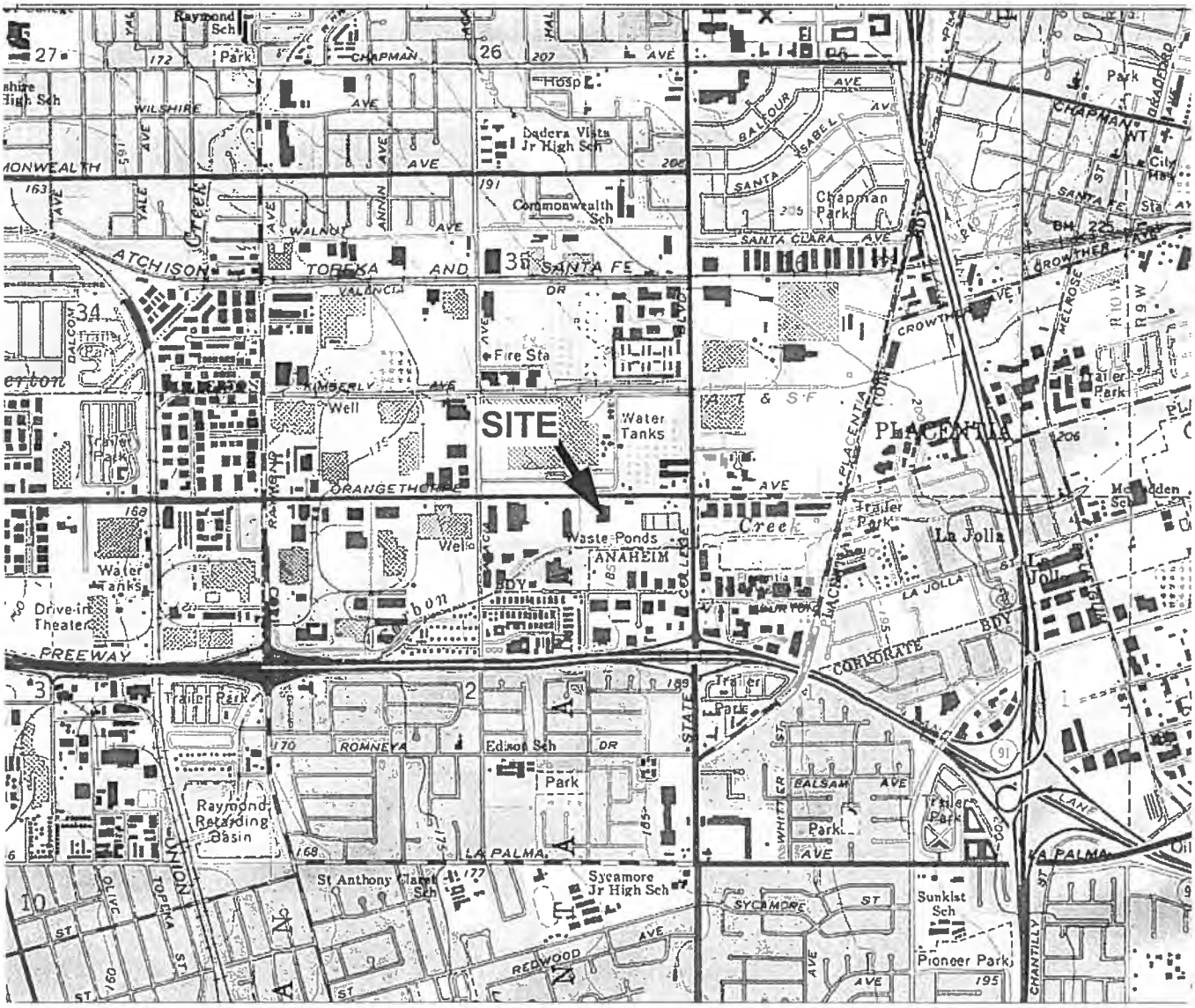
LABARRON INVESTMENTS
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA

(results in milligrams per kilogram)

SAMPLE NUMBER	DEPTH OF SAMPLE	SAMPLE LOCATION	DATE SAMPLED	TOTAL CHROMIUM	HEXAVALENT CHROMIUM	TOTAL LEAD	NICKEL	pH
B13-1	1	Fomer Drum	10/22/02	49.9	NA	25.7	51.6	NA
B13-5	5	Storage Area	10/22/02	5.90	NA	0.90	6.03	NA
B13-10	10		10/22/02	9.81	NA	0.57	5.63	NA
B14-1	1	Southeast Corner	10/22/02	57.5	NA	5.19	71.2	NA
B14-5	5	of Site	10/22/02	4.61	NA	1.16	5.30	NA
B14-10	10		10/22/02	2.81	NA	0.57	2.78	NA
B15-1	1	Southern Property	10/22/02	381	NA	17.3	67.4	NA
B15-5	5	Line	10/22/02	4.44	NA	0.62	2.87	NA
B15-10	10		10/22/02	3.95	NA	1.24	4.61	NA
B16-1	1	Southern Property	10/22/02	25.4	NA	7.52	19.1	NA
B16-5	5	Line	10/22/02	10.2	NA	2.45	11.0	NA
B16-10	10		10/22/02	3.68	NA	1.01	3.87	NA
B17-1	1	Southern Property	10/22/02	7.14	NA	3.57	8.93	NA
B17-5	5	Line	10/22/02	4.18	NA	0.98	4.53	NA
B17-10	10		10/22/02	2.51	NA	1.04	2.41	NA
B18-3	3	Background Sample Northwestern Portion of Site	10/22/02	10.8	0.20	7.76	16.4	8.56
B19-3	3	Background Sample Northeastern Portion of Site	10/22/02	7.85	0.17	1.97	7.95	9.04
B20-3	3	Background Sample Souteastern Portion of Site	10/22/02	7.16	0.16	2.25	8.78	8.84
EPA PRG (Industrial Soils)				450	64	750	41,000	

Notes
1 NA = Not analyzed for listed constituent

FIGURES



FORMER TRENT TUBE FULLERTON
2100 EAST ORANGETHORPE
FULLERTON, CALIFORNIA

Client: **LABARRON INVESTMENTS** Project No.: **420-01**

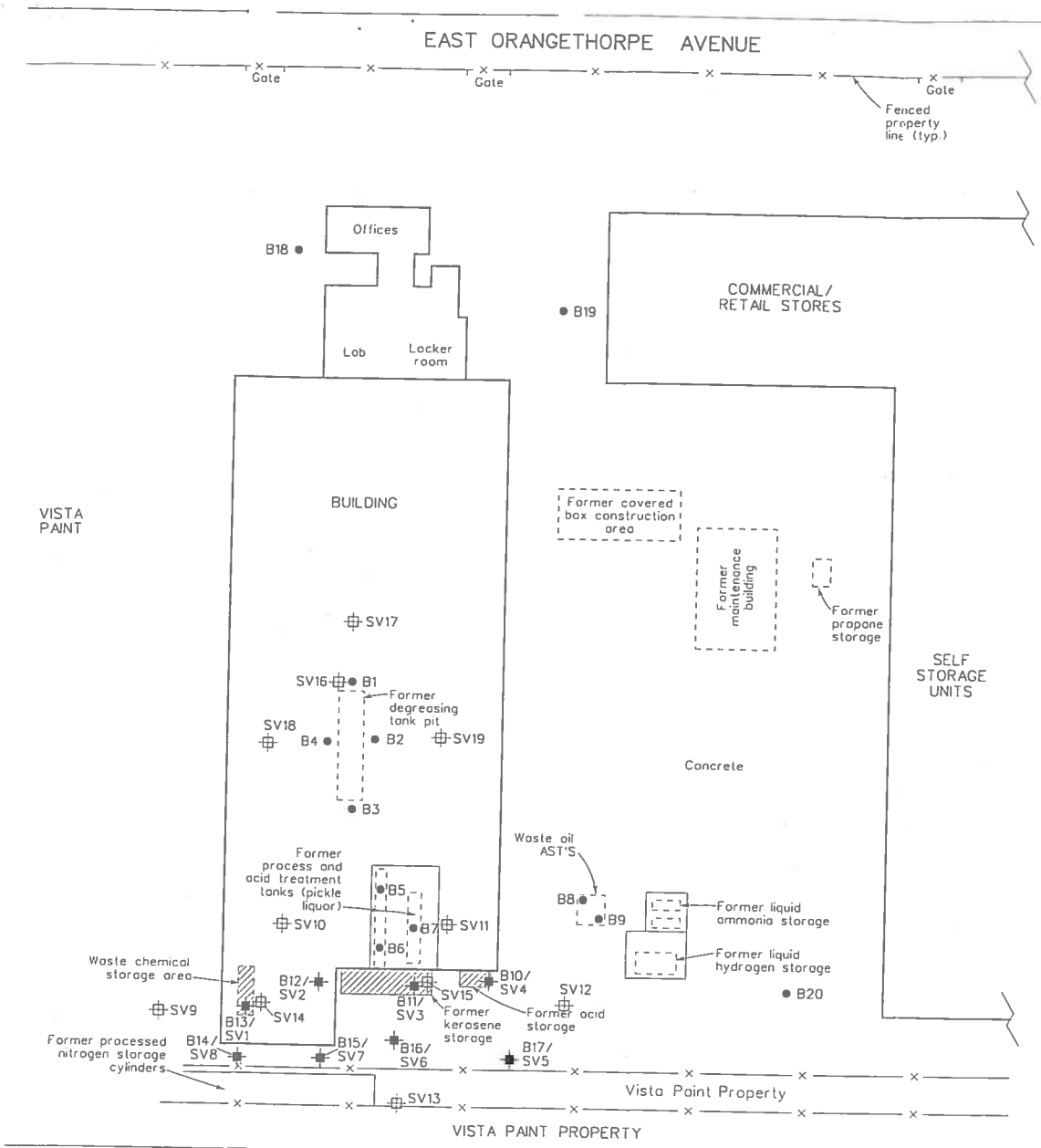
FREY ENVIRONMENTAL, INC.

NOTE:

1) All locations and dimensions are approximate.
2) Base map from USGS 7.5 minute California topographic quadrangle, printed from Topo.

SITE LOCATION MAP

Date: **AUGUST 2002** Figure: **1**



EXPLANATION

- BARREL STORAGE AREA
- B17/ SV5 — SOIL BORING AND VAPOR PROBE LOCATION
- B1 — SOIL BORING LOCATIONS
- SV9 — PROPOSED SOIL VAPOR PROBE LOCATION

NOTES

1) All locations and dimensions are approximate.
2) Base map from drawing provided by Trent Tube Fullerton titled "Facility Map", not dated, and site notes by FREY Environmental, Inc.

NORTH

0 60 120

APPROXIMATE SCALE IN FEET

FORMER TRENT TUBE FULLERTON
2100 EAST ORANGETHORPE AVENUE
FULLERTON, CALIFORNIA

Client: LABARRON INVESTMENTS Project No.: 420-01

FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING PROPOSED SOIL VAPOR PROBE LOCATIONS

Date: APRIL 2003 Figure 2

42001-3.dgn